

WHAT IS CLAIMED IS:

1. An actuator assembly comprising:
an actuator block including a body portion and at least one actuator arm extending from the body portion of the actuator block and the body portion including a damping assembly coupled to the body portion.
2. The actuator assembly of claim 1 wherein the damping assembly includes at least one viscoelastic damping layer.
3. The actuator assembly of claim 1 wherein the damping assembly includes at least one rigid body coupled to the body portion of the actuator block.
4. The actuator assembly of claim 1 wherein the damping assembly includes a first rigid body, a second rigid body and a viscoelastic damping layer.
5. The actuator assembly of claim 1 wherein the viscoelastic damping layer is interposed between the first and second rigid bodies.
6. The actuator assembly of claim 1 wherein the body portion includes an elongate dimension between opposed ends and the damping assembly is positioned proximate to the first end spaced from the second end.
7. The actuator assembly of claim 1 and further including a drive assembly coupled to the actuator block and the damping assembly being spaced from the drive assembly.

8. The actuator assembly of claim 1 wherein the body portion includes a window opened to an inner void of the actuator body and the damping assembly includes a rigid body having a width sized to seat in the window of the actuator body.

9. The actuator assembly of claim 8 wherein the damping assembly includes first and second rigid bodies and a damping layer and the first rigid body is sized to fit in the window and the second rigid body is wider than the window.

10. The actuator assembly of claim 2 wherein the rigid body is removably coupled to the body portion of the actuator block.

11. A servo writing apparatus comprising:
a spindle assembly; and
a servo writer assembly including an actuator assembly having a plurality heads coupled to a plurality of actuator arms extending from an actuator body and the actuator body including a damper assembly.

12. The servo writing apparatus of claim 11 wherein the damping assembly includes a rigid body or block.

13. The servo writing apparatus of claim 11 wherein the actuator block includes a window opened to a cavity or void of the actuator body and the damping assembly includes at least one rigid block disposed in the window of the actuator body .

14. The servo writing apparatus of claim 11 wherein the actuator assembly includes a drive assembly and the actuator body includes a proximal end coupled to the drive assembly and a distal end cantilevered therefrom and the damper assembly is positioned proximate to the distal end of the actuator body.

15. The servo writing apparatus of claim 12 wherein the rigid block or body is removably coupled to the actuator body.

16. A method comprising the steps of:

providing an actuator assembly including an actuator body having a plurality of actuator arms extending therefrom;
measuring vibration to provide a vibration profile of the actuator body in response to actuation thereof ; and
providing a damping assembly to control vibration modes of the actuator body.

17. The method of claim 16 wherein the damping assembly is designed to control vibration modes in response to the vibration profile of the actuator body.

18. The method of claim 16 wherein the damping assembly is designed to control a torsion vibration mode of the actuator body.

19. The method of claim 16 wherein the step of providing a vibration profile comprises the step of:

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measuring vibration at spaced positions on the actuator body using an array of sensors on the actuator body.

20. The method of claim 16 wherein vibration is measured at spaced positions between opposed proximal and distal ends of the actuator body.